

MICROECONOMICS

C30.0001.05

SPRING 2008

TUESDAY & THURSDAY: 9:30-10:15

Course Instructor: Simon Bowmaker

Office Hours: Tuesday 3-4 PM or by appointment

Office: KMC 7-179

E-mail address: sbowmake@stern.nyu.edu

Please use "Micro" in subject line.

Location: UC 61

T.A.: Ayah El Said (aes420@nyu.edu)

T.A. Section: Thursday 8-9:15 AM, UC 61

Course Description

Economics is the study of production and allocation of scarce resources, and how agents make decisions under conditions of scarcity and uncertainty. This course provides a rigorous introduction to economics, with special emphasis on microeconomics. It will introduce you to economics as a discipline and as a way of thinking. It will also provide you with a set of tools, which will be very useful in other economics courses.

We will first study the behavior of individual consumers and firms. Then we will give you some insight into how markets work and whether market outcomes are desirable. We will also look at situations in which the firm is a monopolist, or competes with a limited number of rivals. Some of the key concepts we will introduce include economic incentives, marginal analysis, opportunity cost (which costs matter), market efficiency (what does it mean for a market to work) and strategic behavior (how to predict and respond to your rivals' decisions).

The tools that you will be acquainted with in this class are fundamental for most upper division courses of the Economics major as well as classes in Finance, Accounting and Marketing.

Textbook: Robert S. Pindyck, and Daniel L. Rubinfeld: *Microeconomics* (6th Edition), Prentice-Hall Series in Economics. The textbook can be bought at the NYU Bookstore.

Course Blackboard

The course's blackboard can be found at <http://sternclasses.nyu.edu> using your Stern netID/password and choosing the course titled *Microeconomics*.

Please familiarize yourself with the course web site ASAP. There you will be able to find among others:

1. lecture notes

2. assignments and keys to them
3. sample exams
4. announcements
5. discussion forum

Communicating with us electronically: As far as is possible, rather than emailing us, you should post your questions on the relevant Blackboard **discussion forum**. This is far more efficient than individual back-and-forth email. If questions raised by a student via email are relevant for the rest of the class, we will post this on the discussion forum.

There are two discussion forums currently active:

1. Administrative questions about the course
2. General questions and comments about what we cover in class

Before posting a question, make sure that you read through the course content on Blackboard, the frequently-asked-questions, and the questions other students have posted. Often, you will find the answer to your question here.

Prerequisites: This course assumes familiarity with multi-variate calculus and high school algebra. In addition, we will have a review section on most essential mathematical tools.

TA Sessions: We meet twice a week and in addition a Teaching Assistant (TA) will conduct a recitation every week. TA sessions start at the FIRST week of classes.

Homework Assignments: There will be **weekly** homework assignments. Homework assignments will be downloadable from the class website and will consist of problems and short answer questions based on the material presented in class. The objective of these assignments is to give you the opportunity to practise the new concepts. The more problems you work out, the higher your chances of getting an A. It is that simple. I encourage you to work in teams. Homework assignments will not be graded. TAs will go over the solutions in each week's session. If you solved a problem using a different method than the presented solution, and want to check whether it is correct or not, you are encouraged to discuss it with your TA during office hours.

Quiz: There will be 4 quizzes, one in the second week of the course, one before the midterm, and one before the final. Provided that you take ALL three exams, only the **two best** scores will count towards your grade, otherwise the average score will count towards your grade. There are absolutely no make-ups for missed quizzes.

Examinations-Make-up Test Policy: There will be a midterm and a final exam. Tests are written and will be taken without books or notes. They will consist of problems similar to the ones in the problem sets; short answer questions which may be in the form of multiple choice. The final exam will be cumulative.

No Make-up Exams: If you miss the midterm for a justified reason and provide sufficient evidence, your final score will be counted instead of the midterm exam. If you miss the midterm for any other reason you will get a score of 0. If for a justified reason you miss the final exam you will receive an incomplete, which has to be removed in the earliest possible semester.

Review Sessions: The TA will run a review session before the midterm and one before the final. They will go over sample exams that I will hand out a week in advance.

Your final exam: If you want to receive a copy of your final exam after the course is over you will need to make an appointment with me or your TA. I will destroy all material at the beginning of the spring quarter.

Errors: The TAs and myself will make every effort to grade fairly and evenly. But some errors in grading may occur. Please check your exams and in case of grading errors, please return your exam to the grader with a written note explaining where the error is. We may keep copies of all, or of a fraction of graded exams, prior to handing them back. The whole exam may be regraded in this case. Please keep copies of your exams until the quarter is over.

Grading Policy: Your grade will be determined by the following

Quiz	20%
Midterm	30%
Final	50%

I will use the grades A+, A, A-, B+, ..., C- but I will only use grade D.

How to do well in this course: Practise problems. As many as you can! Work with your friends on the difficult problems. Learn from each other. Seek help from me or from the TA's. We are here to help you.

Microeconomics
Reading List and Tentative Course Schedule

Course outline and calendar:

Tuesday, Jan 22: Introduction and Preliminaries: what is Economics? The study of how a society uses its limited resources to produce, trade and consume goods and services.

Thursday, Jan 24: The Basics of Supply and Demand. The Demand Curve describes a consumer's choice, while the Supply Curve describes how much a firm will produce. Equilibrium of Supply and Demand through price.

Pindyck Chapter 1

T.A. Section: Math Review on Derivatives

Tuesday, Jan 29: Consumer Behavior (1): preferences and their representation by a utility function. How do consumers make a decision given the alternatives that are available?

Thursday, Jan 31: Consumer Behavior (2): utility maximization. How do consumers maximize their utility given the budget constraint? The use of utility maximization to derive Marshallian demand curves.

Pindyck Chapter 2

Tuesday, Feb 5: Individual Demand: Study how utility maximizing choice of a good varies as Income Changes (Engel Curve), and as the price of the good itself changes (Demand Curve).

Pindyck Chapter 3

Thursday, Feb 7: Market Demand: add up individual demands to get market demand. Discuss Elasticity of Demand, the responsiveness of demand to price.

Pindyck Chapter 4

Tuesday, Feb 12: Production Part I: We introduce firms and how they decide to produce. A firm is described by how it can transform inputs such as labor and capital into outputs, which is called a production function. We also discuss marginal versus average product of labor and capital.

Thursday, Feb 14: Production Part II: Production with two inputs. The tradeoff between using more labor or capital is called the marginal rate of technical substitution. As well we discuss returns to scale, i.e. are larger plants more productive?

Pindyck Chapter 6

Tuesday, Feb 19: The Cost of Production: We discuss the difference between sunk costs and fixed costs and costs in the short run versus the long run.

Thursday Feb 21: The Cost of Production II: Long-Run versus Short-Run Costs and Economies of Scale. Producing two products at once and Economies of Scope.

Pindyck Chapter 7

Tuesday, Feb 26: Profit Maximization and Competitive Supply. We look at the firm's decision to produce in a perfectly competitive market. If a firm is maximizing profits, then it sets marginal costs equal to marginal revenue.

Pindyck Chapter 8

Thursday, Feb 28: The Analysis of Competitive Markets. We use the tools of Consumer and Producer Surplus to analyze the effect of a tax or rent control on the efficiency of a market.

Pindyck Chapter 9

Tuesday, March 11: Midterm Review Lecture.

Wednesday, March 12: Midterm at 6:15-7:30 PM in a room to be announced.

break week

Tuesday, March 25: Market Power: Monopoly and Monopsony (I). We analyze firms with market power that do not take the market price as given, but can choose the price of their products.

Thursday, March 27: Monopoly and Monopsony and Antitrust (II): The social cost of monopoly and laws against monopoly: the antitrust laws.

Pindyck Chapter 10

Tuesday, April 1: Pricing with Market Power. We look at Price Discrimination, the practice of setting different prices for different types of consumers (such as students discounts or quantity discounts).

Pindyck Chapter 11

Thursday, April 3: Game Theory (I): Simultaneous moves. We examine strategic decision making, when you are interacting with a competitor. We look at dominant strategies and a solution concept called Nash Equilibrium.

Tuesday, April 8: Game Theory (II): Games Trees, Commitment & Threats. We look at sequential games in this lecture and the strategic role of commitment and threats.

Pindyck Chapter 13

Thursday, April 10: Monopolistic Competition and Oligopoly. We examine how firms set price or quantity when they have a single competitor (Bertrand and Cournot Competition).

Pindyck Chapter 12

Tuesday, April 15: Markets for Factor Inputs. How do firms choose how many inputs to purchase, including the market for labor?

Pindyck Chapter 14

Thursday, April 17: Choice under Uncertainty. Expected Utility and Risk Preferences. How do we make choices when certain variables such as income and prices are uncertain (making choices with risk)?

Pindyck Chapter 5

Tuesday, April 22: Asymmetric Information (I): Adverse Selection & Signaling. Frequently a seller or producer knows more about the quality of the product than the buyer does. How does asymmetric information affect economic outcomes?

Pindyck Chapter 17

Thursday, April 24: Externalities and Public Goods. In many situations your actions affect others indirectly. Does this affect market efficiency? We will talk about the failure of several fisheries due to the externality problem.

Pindyck Chapter 17

Tuesday, April 29: Finish topics left over.

Thursday, May 1: Final Review Lecture.

Final Exam: Friday, May 9th from 10-11:50 AM in a room to be announced.